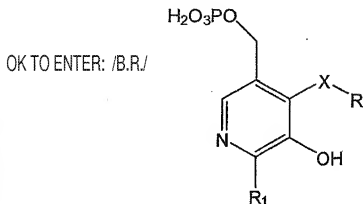


**AMENDMENTS TO THE CLAIMS:**

Kindly cancel claims 10-35, without prejudice, amend claims 1 and 4, and add new claim 36 as shown below. This listing of claims will replace all prior versions and listings of claims in the application:

**Claim 1 (currently amended):** A compound having the formula:



wherein X represents a divalent linking moiety selected from the group  $-\text{CH}=\text{N}-$  or  $-\text{CH}=\text{CR}_a-$ ;

R is a radical selected from the group consisting of an unsubstituted or substituted alkyl ( $\text{C}_1-\text{C}_6$ ) radical, an unsubstituted or substituted aryl ( $\text{C}_6-\text{C}_{14}$ ) radical, an unsubstituted or substituted aralkyl ( $\text{C}_7-\text{C}_{15}$ ) radical, an unsubstituted or substituted heterocyclic radical, or a radical of the formula  $-\text{NR}_a-\text{X}'-\text{R}_b$ , wherein X' represents a valence bond or a divalent linking moiety selected from the group of  $-\text{C}(=\text{O})-$ ,  $-\text{S}(=\text{O})_2-$  or  $-(\text{CH}_2)_n-$ , n being an integer from 1 to 6;

$\text{R}_a$  represents hydrogen or an unsubstituted or substituted alkyl ( $\text{C}_1-\text{C}_6$ ) radical;

$\text{R}_b$  represents hydrogen, an unsubstituted or substituted alkyl ( $\text{C}_1-\text{C}_6$ ) radical, an

unsubstituted or substituted aryl (C<sub>6</sub>-C<sub>14</sub>) radical, an unsubstituted or substituted aralkyl (C<sub>7</sub>-C<sub>16</sub>) radical, an unsubstituted or substituted heterocyclic radical, an unsubstituted or substituted alicyclic (C<sub>5</sub>-C<sub>7</sub>) radical or a carbalkoxy radical;

R<sub>1</sub> represents an unsubstituted or substituted alkyl (C<sub>1</sub>-C<sub>6</sub>) radical;

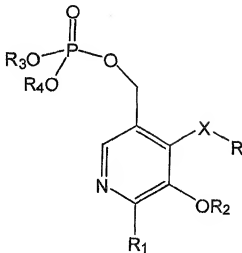
said heterocyclic radical represented by R or R<sub>6</sub> being at least one selected from the group consisting of furan, thiophene, pyrrole, tetrazole, pyridine, piperidine, morpholine, pyrazole, pyridazine, triazole, pyrimidine, oxadiazole, thiadiazole, oxazole, isoxazole, isothiazole, and azepane; said alkyl radical substituent(s) being at least one selected from the group consisting of carboxy, hydroxy, alkoxy, amino, alkylamino, dialkylamino, thiol and alkylthio; said aryl radical substituent(s) and said aralkyl radical substituent(s) being at least one selected from the group consisting of a straight or branched chain, saturated or unsaturated aliphatic group having 1-6 carbon atoms, halogen, nitro, carboxy, hydroxy, hydroxyalkyl, perhaloalkyl, monohaloalkyl, dihaloalkyl, alkoxy, perhaloalkoxy, phenylalkoxy, acyl, acyloxy, acyloxyalkyl, cyano, carbalkoxy, thiol, alkylthio, alkylsulfinyl, alkylsulfonyl, amino, alkylamino, dialkylamino, aminoalkyl, alkylaminoalkyl, dialkylaminoalkyl, sulfonamido, carboxamido, and alkanoylamino; said heterocyclic radical substituent(s) and said alicyclic radical substituent(s) being at least one selected from the group consisting of a straight or branched chain, saturated or unsaturated aliphatic group having 1-6 carbon atoms, halogen, perhaloalkyl, monohaloalkyl, dihaloalkyl, alkoxy, acyl, acyloxy, acyloxyalkyl, phenylalkoxy, hydroxy, hydroxyalkyl, alkylsulfonate, thiol, alkylthio, alkylsulfinyl, alkylsulfonyl, nitro, carboxy, carbalkoxy, or an unsubstituted and substituted aryl (C<sub>6</sub>-C<sub>14</sub>) radical; the isomeric forms of said compound and the pharmaceutically acceptable salts of said compound, except that R in said formula does not represent triazole, an unsubstituted methyl group, or butanoic

acid, and  $R_b$  does not represent pyridine when  $R_a$  represents hydrogen and  $X'$  represents -  
C(=O)-.

**Claim 2 (previously presented):** A pharmaceutical composition for treating at least one of infection caused by virus of the Flaviviridae family and disease associated with said infection, said composition comprising a compound as claimed in claim 1 in an amount effective to attenuate infectivity of said virus, and a pharmaceutically acceptable carrier medium.

**Claim 3 (original):** A pharmaceutical composition as claimed in claim 2 further comprising at least one supplemental active agent selected from the group of interferon, a pegylated interferon, ribavirin, protease inhibitors, polymerase inhibitors, small interfering RNA compounds, anti-sense compounds, nucleotide analogs, nucleoside analogs, immunoglobulins, immunomodulators, hepatoprotectants, anti-inflammatory agents, antibiotics, antivirals, and anti-infective compounds.

**Claim 4 (currently amended):** A compound having the formula:



wherein X represents a divalent linking moiety selected from the group -CH=N- or  
-CH=CR<sub>a</sub>-;

HAYES SOLOWAY P.C.  
3450 E. SUNRISE DRIVE,  
SUITE 140  
TUCSON, AZ 85718  
TEL. 520.882.7623  
FAX. 520.882.7643

175 CANAL STREET  
MANCHESTER, NH 03101  
TEL. 603.668.1400  
FAX. 603.668.8567

R is a radical selected from the group consisting of an unsubstituted or substituted alkyl ( $C_1$ - $C_6$ ) radical, an unsubstituted or substituted aryl ( $C_6$ - $C_{14}$ ) radical, an unsubstituted or substituted aralkyl ( $C_7$ - $C_{15}$ ) radical, an unsubstituted or substituted heterocyclic radical, or a radical of the formula  $-NR_a-X'-[[R_b]]R_b$ , wherein  $X'$  represents a valence bond or a divalent linking moiety selected from the group of  $-C(=O)-$ ,  $-S(=O)_2-$  or  $-(CH_2)_n-$ , n being an integer from 1 to 6;

$R_a$  represents hydrogen or an unsubstituted or substituted alkyl ( $C_1$ - $C_6$ ) radical;

$R_b$  represents hydrogen, an unsubstituted or substituted alkyl ( $C_1$ - $C_6$ ) radical, an unsubstituted or substituted aryl ( $C_6$ - $C_{14}$ ) radical, an unsubstituted or substituted aralkyl ( $C_7$ - $C_{16}$ ) radical, an unsubstituted or substituted heterocyclic radical, an unsubstituted or substituted alicyclic ( $C_5$ - $C_7$ ) radical or a carbalkoxy radical;

$R_1$  represents an unsubstituted or substituted alkyl ( $C_1$ - $C_6$ ) radical;

said heterocyclic radical ~~represents~~ represented by R or  $R_b$  being at least one selected from the group consisting of furan, thiophene, pyrrole, tetrazole, pyridine, piperidine, morpholine, pyrazole, pyridazine, triazole, pyrimidine, oxadiazole, thiadiazole, oxazole, isoxazole, isothiazole, and azepane; said alkyl radical substituent(s) being at least one selected from the group consisting of carboxy, hydroxyl, alkoxy, amino, alkylamino, dialkylamino, thiol and alkylthio; said aryl radical substituent(s) and said aralkyl radical substituent(s) being at least one selected from the group consisting of a straight or branched chain, saturated or unsaturated aliphatic group having 1-6 carbon atoms, halogen, nitro, carboxy, hydroxyl, hydroxyalkyl, perhaloalkyl, monohaloalkyl, dihaloalkyl, alkoxy, perhaloalkoxy, phenylalkoxy, acyl, acyloxy, acyloxyalkyl, cyano, carbalkoxy, thiol, alkylthio, alkylsulfinyl, alkylsulfonyl,

amino, alkylamino, dialkylamino, aminoalkyl, alkylaminoalkyl, dialkylaminoalkyl, sulfonamide, carboxamido, and alkanoylamino; said heterocyclic radical substituent(s) and said alicyclic radical substituent(s) being at least one selected from the group consisting of a straight or branched chain, saturated or unsaturated aliphatic group having 1-6 carbon atoms, halogen, perhaloalkyl, monohaloalkyl, dihaloalkyl, alkoxy, acyl, acyloxy, acyloxyalkyl, phenylalkoxy, hydroxyl, hydroxyalkyl, alkylsulfonate, thiol, alkylthio, alkylsulfinyl, alkylsulfonyl, nitro, carboxy, carbalkoxy, or an unsubstituted and substituted aryl (C<sub>6</sub>-C<sub>14</sub>) radical;

R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> may be the same or different and represent hydrogen or a radical selected from the group consisting of substituted or unsubstituted straight or branched alkyl (C<sub>1</sub>-C<sub>6</sub>), substituted or unsubstituted alicyclic (C<sub>5</sub>-C<sub>7</sub>), substituted or unsubstituted aryl (C<sub>6</sub>-C<sub>14</sub>) radicals, or an amino acid residue and with the proviso that at least one of R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> must be other than hydrogen; and

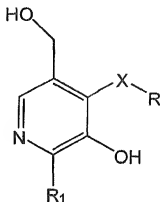
the isomeric forms of said compound and the pharmaceutically acceptable salts of said compound, except that R in said formula does not represent triazole.

**Claims 5 (previously presented):** A pharmaceutical composition for treating at least one of infection caused by virus of the Flaviviridae family and disease associated with said infection, said composition comprising a compound as claimed in claim 4 in an amount effective to attenuate infectivity of said virus, and a pharmaceutically acceptable carrier medium.

**Claim 6 (original):** A pharmaceutical composition as claimed in claim 5, further comprising at least one supplemental active agent selected from the group of interferon, a pegylated interferon, ribavirin, protease inhibitors, polymerase inhibitors, small interfering RNA compounds, anti-sense compounds, nucleotide analogs, nucleoside analogs, immunoglobulins,

immunomodulators, hepatoprotectants, anti-inflammatory agents, antibiotics, antivirals, and anti-infective compounds.

**Claim 7 (previously presented):** A compound having the formula:



wherein X represents a divalent linking moiety selected from the group -CH=N- or -CH=CR<sub>a</sub>-;

R is a radical selected from the group consisting of an unsubstituted or substituted alkyl (C<sub>1</sub>-C<sub>6</sub>) radical, an unsubstituted or substituted aryl (C<sub>6</sub>-C<sub>14</sub>) radical, an unsubstituted or substituted aralkyl (C<sub>7</sub>-C<sub>15</sub>) radical, an unsubstituted or substituted heterocyclic radical, or a radical of the formula -NR<sub>a</sub>-X'-R<sub>b</sub>, wherein X' represents a valence bond or a divalent linking moiety selected from the group of -C(=O)-, -S(=O)<sub>2</sub>- or -(CH<sub>2</sub>)<sub>n</sub>-, n being an integer from 1 to 6;

R<sub>a</sub> represents hydrogen or an unsubstituted or substituted alkyl (C<sub>1</sub>-C<sub>6</sub>) radical;

R<sub>b</sub> represents hydrogen, an unsubstituted or substituted alkyl (C<sub>1</sub>-C<sub>6</sub>) radical, an unsubstituted or substituted aryl (C<sub>6</sub>-C<sub>14</sub>) radical, an unsubstituted or substituted aralkyl (C<sub>7</sub>-C<sub>16</sub>) radical, an unsubstituted or substituted heterocyclic radical, an unsubstituted or substituted alicyclic (C<sub>5</sub>-C<sub>7</sub>) radical or a carbalkoxy radical;

R<sub>1</sub> represents an unsubstituted or substituted alkyl (C<sub>1</sub>-C<sub>6</sub>) radical; and

said heterocyclic radical represented by R or R<sub>6</sub> being at least one selected from the group consisting of furan, thiophene, pyrrole, tetrazole, pyridine, piperidine, morpholine, pyrazole, pyridazine, triazole, pyrimidine, oxadiazole, thiadiazole, oxazole, isoxazole, isothiazole, and azepane; said alkyl radical substituent(s) being at least one selected from the group consisting of carboxy, hydroxy, alkoxy, amino, alkylamino, dialkylamino, thiol and alkylthio; said aryl radical substituent(s) and said aralkyl radical substituent(s) being at least one selected from the group consisting of a straight or branched chain, saturated or unsaturated aliphatic group having 1-6 carbon atoms, halogen, nitro, carboxy, hydroxy, hydroxyalkyl, perhaloalkyl, monohaloalkyl, dihaloalkyl, alkoxy, perhaloalkoxy, phenylalkoxy, acyl, acyloxy, acyloxyalkyl, cyano, carbalkoxy, thiol, alkylthio, alkylsulfinyl, alkylsulfonyl, amino, alkylamino, dialkylamino, aminoalkyl, alkylaminoalkyl, dialkylaminoalkyl, sulfonamide, carboxamide, and alkanoylamino; said heterocyclic radical substituent(s) and said alicyclic radical substituent(s) being at least one selected from the group consisting of a straight or branched chain, saturated or unsaturated aliphatic group having 1-6 carbon atoms, halogen, perhaloalkyl, monohaloalkyl, dihaloalkyl, alkoxy, acyl, acyloxy, acyloxyalkyl, phenylalkoxy, hydroxy, hydroxyalkyl, alkylsulfonate, thiol, alkylthio, alkylsulfinyl, alkylsulfonyl, nitro, carboxy, carbalkoxy, or an unsubstituted and substituted aryl (C<sub>6</sub>-C<sub>14</sub>) radical; the isomeric forms of said compound and the pharmaceutically acceptable salts of said compound, except that R in said formula does not represent ethoxyphenyl.

**Claim 8 (previously presented):** A pharmaceutical composition for treating at least one of infection caused by virus of the Flaviviridae family and disease associated with said infection,

HAYES SOLOWAY P.C.  
3450 E. SUNRISE DRIVE,  
SUITE 140  
TUCSON, AZ 85718  
TEL. 520.882.7623  
FAX. 520.882.7643

175 CANAL STREET  
MANCHESTER, NH 03101  
TEL. 603.668.1400  
FAX. 603.668.8567

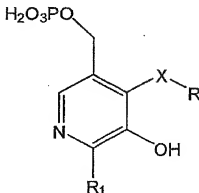
said composition comprising a compound as claimed in claim 7 in an amount effective to attenuate infectivity of said virus, and a pharmaceutically acceptable carrier medium.

**Claim 9 (original):** A pharmaceutical composition as claimed in claim 8 further comprising at least one supplemental active agent selected from the group of interferon, a pegylated interferon, ribavirin, protease inhibitors, polymerase inhibitors, small interfering RNA compounds, anti-sense compounds, nucleotide analogs, nucleoside analogs, immunoglobulins, immunomodulators, hepatoprotectants, anti-inflammatory agents, antibiotics, antivirals, and anti-infective compounds.

**Claims 10-35 (cancelled)**

**Claim 36 (new):** A pharmaceutical composition for treating at least one of infection caused by virus of the Flaviviridae family and disease associated with said infection, said composition comprising:

- (a) a compound having the formula:



wherein X represents a divalent linking moiety selected from the group  $-CH=N-$  or  $-CH=CR_2-$ ;

R is a radical selected from the group consisting of an unsubstituted or substituted alkyl ( $C_1-C_6$ ) radical, an unsubstituted or substituted aryl ( $C_6-C_{14}$ ) radical, an unsubstituted or



substituted aralkyl ( $C_7-C_{15}$ ) radical, an unsubstituted or substituted heterocyclic radical, or a radical of the formula  $-NR_a-X'-R_b$ , wherein  $X'$  represents a valence bond or a divalent linking moiety selected from the group of  $-C(=O)-$ ,  $-S(=O)_2-$  or  $-(CH_2)_n-$ ,  $n$  being an integer from 1 to 6;

$R_a$  represents hydrogen or an unsubstituted or substituted alkyl ( $C_1-C_6$ ) radical;

$R_b$ , represents hydrogen, an unsubstituted or substituted alkyl ( $C_1-C_6$ ) radical, an unsubstituted or substituted aryl ( $C_6-C_{14}$ ) radical, an unsubstituted or substituted aralkyl ( $C_7-C_{16}$ ) radical, an unsubstituted or substituted heterocyclic radical, an unsubstituted or substituted alicyclic ( $C_5-C_7$ ) radical or a carbalkoxy radical;

$R_1$  represents an unsubstituted or substituted alkyl ( $C_1-C_6$ ) radical;

said heterocyclic radical represented by  $R$  or  $R_b$  being at least one selected from the group consisting of furan, thiophene, pyrrole, tetrazole, pyridine, piperidine, morpholine, pyrazole, pyridazine, triazole, pyrimidine, oxadiazole, thiadiazole, oxazole, isoxazole, isothiazole, and azepane; said alkyl radical substituent(s) being at least one selected from the group consisting of carboxy, hydroxy, alkoxy, amino, alkylamino, dialkylamino, thiol and alkylthio; said aryl radical substituent(s) and said aralkyl radical substituent(s) being at least one selected from the group consisting of a straight or branched chain, saturated or unsaturated aliphatic group having 1-6 carbon atoms, halogen, nitro, carboxy, hydroxy, hydroxyalkyl, perhaloalkyl, monohaloalkyl, dihaloalkyl, alkoxy, perhaloalkoxy, phenylalkoxy, acyl, acyloxy, acyloxyalkyl, cyano, carbalkoxy, thiol, alkylthio, alkylsulfinyl, alkylsulfonyl, amino, alkylamino, dialkylamino, aminoalkyl, alkylaminoalkyl, dialkylaminoalkyl, sulfonamido, carboxamido, and alkanoylamino; said heterocyclic radical substituent(s) and said alicyclic radical substituent(s) being at least one selected from the group consisting of a straight or

branched chain, saturated or unsaturated aliphatic group having 1-6 carbon atoms, halogen, perhaloalkyl, monohaloalkyl, dihaloalkyl, alkoxy, acyl, acyloxy, acyloxyalkyl, phenyalkoxy, hydroxy, hydroxyalkyl, alkylsulfonate, thiol, alkylthio, alkylsulfinyl, alkylsulfonyl, nitro, carboxy, carbalkoxy, or an unsubstituted and substituted aryl (C<sub>6</sub>-C<sub>14</sub>) radical; the isomeric forms of said compound and the pharmaceutically acceptable salts of said compound, except that R in said formula does not represent triazole; and

(b) at least one supplemental active agent selected from the group of interferon, a pegylated interferon, ribavirin, protease inhibitors, polymerase inhibitors, small interfering RNA compounds, anti-sense compounds, nucleotide analogs, nucleoside analogs, immunoglobulins, immunomodulators, hepatoprotectants, anti-inflammatory agents, antibiotics, antivirals, and anti-infective compounds.

HAYES SOLOWAY P.C.  
3450 E. SUNRISE DRIVE,  
SUITE 140  
TUCSON, AZ 85718  
TEL. 520.882.7623  
FAX. 520.882.7643

175 CANAL STREET  
MANCHESTER, NH 03101  
TEL. 603.668.1400  
FAX. 603.668.8567